VI. The Botanical History of Mentha exigua. By James Edward Smith, M. D. F. R. S. P. L. S.

## Read June 3, 1794.

TN countries which have been the most completely examined with respect to their natural history, the science is still so far remote from perfection, that in fome departments new productions are every day discovered, while in others we find ourselves perpetually in need of correction as to nomenclature. Few nations have had their botanical productions fo fully elucidated as those of England and Sweden; yet fuch as look a little beyond the ken of vulgar eyes, find the Floras of both extremely imperfect, and our own particularly has more than one plant-attributed to it upon very flimfy authorities. Perhaps the investigation of fuch doubtful natives may be as profitable as the fearch after new ones, provided we proceed cantiously and on fure critical grounds. If we disprove their authenticity we not only fave trouble to compiling publishers in future, but, which is of infinitely more importance, we prevent much perplexity to honest practical students and collectors, who confide in fuch writers. These considerations induce me to inform my fellow-labourers in the botany of Great Britain, that they may for the future spare themselves the trouble of searching for Mentha exigua; and this is the more incumbent upon me, as I have myself

in this instance been instrumental in leading them astray, by confiding too heedlessly in my predecessors.

At fome period between the publication of the first edition of Species Plantarum, 1753, and the Centuria 2da Plantarum, 1756 (Am. Acad. vol. iv. 207), Linnæus received from the late Mr. Philip Miller of Chelfea two dried specimens of an apparent species of Mentha (mint), marked Mentha aquatica exigua Tragi, lib. i. cap. 6. Upon what authority Linnæus confidered this as an English plant I cannot precifely tell, nothing occurring on the fubject in Miller's letters of that period. Probably the above fynonym induced Linnæus to believe this was the plant fo denominated in the third edition of Ray's Synopsis, p. 232, No. 2; and although he might readily perceive it was not the plant of Tragus, his figure being fo very different, yet it might reasonably be presumed that Miller, by marking it fo decidedly, knew it to be the plant of Ray, or rather of his editor Dillenius. Linnaus therefore without fcruple quotes the Synopsis, and at the same time incautiously copies from thence two fynonyms of Lobel and Fuchfius, which are both fo diffimilar to the specimens then before him, that, with all my confidence in his accuracy, I cannot help attributing his omission of the name and page of Tragus, rather to carelessness than intention; for the figure of the latter is not more unlike the Mentha exigua than those of Lobel and Fuchfius. Thus however it was introduced into the Centuria 2da Plantarum, and Syst. Nat. ed. x. and in 1763 made its appearance in the second edition of Species Plantarum, p. 806, the specific character being taken from Miller's specimens, still preserved in the Linnean Herbarium, duplicates of which are in the collection of Miller himself, at present belonging to Sir Joseph Banks.

Mr. Hudson in the mean time published the first edition of his-Flora Anglica in 1762, and on the authority of the Cent. Plant. mentions M. exigua as an English plant, adding a new edition of Lobel's synonym from Parkinson, and copying the Synopsis for its place of growth. Whether he had afterwards found any variety of M. Pulegium which he took for the mint in question; whether his scruples arose from neither himself nor his friends having ever been able to detect M. exigua at all; or whether, which is most probable, the appearance and smell of the specimens in Sir J. Banks's herbarium decided his opinion, he inserted M. exigua in his second edition, 1778, as the very same plant with M. Pulegium; for, not having marked it with a greek  $\beta$ , it seems he did not even think it a variety.

Such was the state of the case when the Linnean Herbarium arrived among us. It was often consulted on this subject; and at length, in order to throw all the light upon it in my power, I published as exact a figure as I could delineate from one of the specimens, in my Plantarum Icones hastenus ineditæ, tab. 38, taking the liberty to strike out all the synonyms except Ray (I ought rather to have said Dillenius), and expressing my doubts of even that. I mentioned a hint of Mr. Hudson's, that the original specimens might have been brought from Scotland by Houston. But this conjecture, as will hereafter appear, is totally groundless.

Since the above publication I have been fo fortunate as to acquire what appears, almost beyond a doubt, the real plant of Dillenius. Sir Joseph Banks, not folicitous to encumber his herbarium with doubtful specimens, very obligingly presented me with a number of unsettled mints from Miller's collection. Among them is one with the following inscription in Buddle's hand-writing:

<sup>&</sup>quot; Mentha verticillata minima odore fragrantissimo. Buddle.

<sup>&</sup>quot;Flores huic minutiffimi multi in unicum communem pedica"lum

i lum perbrevem, cauli per intervalla 7 vel 8 verticillatim positi.

" Tota planta hirfutiufcula, folia acuta, oblonga, et manibus com-

" pressa odorem spirant gratissimum, Rosæ eglanteriæ, &c.

"This is the finest mint to smell to. I found it by the New

"River fide near Stoke Newington. I shewed it your kinsman with

" four or five forts more within a furlong of one another.

"I take this to be Mentha arvensis verticillata, folio rotundiore, odore

" aromatico, D. Vernon, R. Syn. (ed. 2.) 123.

"I want your opinion in this."

From a comparison of the above writing with the passage in the Synopsis relative to the native place of the Mentha No. 2, I think there can be no doubt of mine being the original specimen gathered by Buddle in company with Mr. Francis Dale, and sent to the uncle of the latter, Mr. Samuel Dale, author of the Pharmacologia. It is moreover sufficiently like the sigures of Tragus, Lobel, and Fuchsius, and may be the M. gentilis of Linnæus, as Dr. Stokes conjectured; but this point is not to our present purpose. I have only to add, that it has no resemblance to the M. exigua.

The latter therefore was still only known from Miller's specimens; but every practical botanist will readily conceive my joy, when in the summer of 1793 I found the same plant growing in the garden of my friend Edward Hasell, Esq. of Ipswich, where it was shewn to me as an unknown mint. It grew in an American border, and was said to have sprung up spontaneously. As this border had been surnished with bog-earth from the neighbourhood of Ipswich, it was to be presumed the roots had been introduced along with it. Here then was Mentha exigua restored to our English Flora, and I made haste to distribute specimens among those who were solicitous to possess such a treasure. The slowers were not advanced enough to determine whether it were really a Mentha; the

root being fibrous, instead of creeping, was very suspicious; and this circumstance decided it to be no variety of M. Pulegium, though in smell no two plants could be more similar. Roots were sent to Mr. Fairbairn at Chelsea, and fresh specimens to Mr. Sowerby, for his English Botany; but the latter were luckily not in a sufficiently perfect state to be drawn. I say luckily, for this ill-sated Mentha proves after all to be a non-entity; a casual inspection of the Linnean Herbarium having sately satisfied me, that it is neither more nor less than Cunila pulegioides.

Its native country is North America, from whence Kalm communicated a specimen to Linnæus, now in my possession, and at present accompanied by another, probably from Gronovius, referring to Pulegium erectum, odore vehementi, flore violaceo, radice nequaquant reptatrice, Clayton. Gron. Fl. Virgin. 8vo, p. 66. This plant in the 4to edition, p. 90, is made a Melissa, and a description is added, which agrees well with our Mentha exigua. It is not however my present purpose to write a history of this plant as Cunila pulegioides; all I mean now to establish is, that it has no right, under any name, to a place in our Flora Anglica; for there can be no doubt, that its feeds were brought to Mr. Hafell among earth from America, attached to the roots of some of the plants he is frequently receiving from thence, it having been fought for in vain near Ipswich, in the places from whence bog earth was brought to his garden. Whether it is really to be esteemed a Cunila, depends upon its having two stamina or four. In the latter case it may be a Mentha, a Melissa, or more probably, from its habit, annual root, and appearance of the corolla, a Satureja; and Satureja viminea has, like it, the exact finell of penny-royal. Cunila is altogether an artificial genus, made up of Thymi, Saturejæ, &c. which happen to have but two persect stamina.

VII. Obser-